

ABSTRACT

The ligation clip applicator and ligation clip design are provided which are particularly applicable to placement of a surgical ligation clip during a laparoscopic surgical procedure. The clip includes a support member and a clamping arm having enlarged portions thereon. The applicator device has a magazine including first and second longitudinally extending partially closed channels within which the enlarged portions of the support member and the clamping arm are received with the clip held in an open position. First and second articulated jaws are attached to the magazine and have first and second channel extensions therein aligned with the first and second channels of the magazine, so that a clip can be received from the magazine in the jaws with the first and second enlarged portions of the support member and the clamping arm being received in the first and second channel extensions of the jaws. The channel extensions include first and second releasing openings. The jaws are closed about a vessel to pre-clamp the vessel. The clip is pushed forward into the jaws to a position where the enlarged portions of the support member and the clamping arm are aligned with the releasing openings and the support member and the clamping arm are released allowing the support member and the clamping arm to move toward each other to ligate the vessel therebetween.